U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2006-125-EA

CASEFILE/PROJECT NUMBER (optional): COC69830

PROJECT NAME: 4" Pipeline for the Liberty Unit 396-24A1 well

LEGAL DESCRIPTION: Sixth Principal Meridian, Colorado

T. 2 S., R. 95 W.,
Sec. 29, SW¼SW¼;
Sec. 31, lot 7;
Sec. 32, lot 1, W½NW¼, NW¼SW¼;

T. 3 S., R. 95 W.,
Sec. 6, lot 1, S½NE¼, SE¼SW¼, W½SE¼;
Sec. 7, lot 2, 3, E½NW¼.

T. 3 S., R. 96 W.,
Sec. 12, N½SE¼, SW¼SE¼;
Sec. 13, S½NW¼, W½SW¼;
Sec. 24, W½NW¼.

APPLICANT: ExxonMobil Corporation

ISSUES AND CONCERNS (optional): None

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: A pipeline is needed in order to transport gas from the Liberty Unit 396-24A1 well to a connection into an existing line in the Piceance Creek Unit on the north side of Piceance Creek.

Proposed Action: The proposed action is for a 4" steel pipeline from the Liberty Unit 396-24A1 well to tie into the gathering system, at Section 29, T. 2 S., R. 95 W. The pipeline will be buried to a minimum depth of four feet. The pipeline route will cross Piceance Creek. ExxonMobil proposes to bore under the creek rather than dry cut through the creek bed.

Clearing and grading will be done per the "Surface Operating Standards for Oil and Gas Exploration and Development."

Approximately 10 vehicles and a work force of 20 people will be needed during construction. The line will be hydrostatic tested once using 25,284 gallons of water, which will then be disposed of by the current methods utilized in the adjacent Piceance Creek Unit. A 50 foot width will be required during construction reverting back to 35 feet for a permanent width. The right-of-way length will be 27,380 feet on public land encompassing 22.00 acres more or less. The right-of-way will have a term of 30 years to expire December 31, 2035.

No Action Alternative: Under the no action alternative, the application would be denied and the pipeline would not be constructed.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

NEED FOR THE ACTION: ExxonMobil Corporation has applied for a pipeline to connect the Liberty Unit 396-24A1 well in to an existing gathering system.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-49 thru 2-52

Decision Language: "To make public lands available for the siting of public and private facilities through the issuance to applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The entire White River Resource area has been classified as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II. The proposed action is not located within a ten mile radius of any special designation air sheds or non-attainment areas. The air quality criteria pollutant likely to be most affected by the proposed actions is the level of inhalable particulate matter, specifically particles ten microns or less in diameter (PM_{10}) associated with fugitive dust. In addition, slight increases in the following criteria pollutants: carbon monoxide, ozone (secondary pollutant), nitrogen dioxide, and sulfur dioxide may also occur during construction due to the combustion of fossil fuels associated with construction operations. Also, non-criteria pollutants such as visibility, nitric oxide, air toxics (e.g. benzene) and total suspended particulates (TSP) may also experience slight short term increases as a result of the proposed actions (no national ambient air quality standards have been set for non-criteria pollutants). Unfortunately, no monitoring data is available for the survey area. However, it is apparent that current air quality near the proposed location is good because only one location on the western slope (Grand Junction, CO) is monitoring for criteria pollutants other than $PM_{10.}$ Furthermore, the Colorado Air Pollution Control Division (APCD) estimates the maximum PM_{10} levels (24-hour average) in rural portions of western Colorado like the Piceance Basin to be near 50 micrograms per cubic meter ($\mu g/m^3$). This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM_{10} (24-hour average) of 150 $\mu g/m^3$.

Environmental Consequences of the Proposed Action: Cumulative impacts detrimental to air quality in the Piceance Creek Basin can be expected as carbon monoxide, ozone (secondary pollutant), nitrogen dioxide, particulate matter, and sulfur dioxide levels are elevated due to increased oil and gas development. Construction equipment producing elemental and organic carbon via fuel combustion combined with surface disturbing activities that leave soils exposed to eolian processes will both increase production of particulate matter (PM_{10}) during construction. Elemental and organic carbon existing in the air as PM_{10} can reduce visibility and increase the potential of respiratory health problems to exposed parties. However, following initial construction, suggested mitigation, and successful interim reclamation, criteria pollutant levels should return to near pre-construction levels.

Environmental Consequences of the No Action Alternative: Impacts from the no-action alternative are not anticipated.

Mitigation: The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive particulate matter (fugitive dust) from associated access roads, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. In addition, the application of a BLM approved dust suppressant (e.g. water or chemical stabilization methods) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph. Surfacing access roads with gravels will also help mitigate production of fugitive particulate matter. Land clearing, grading, earth moving or excavation activities will be suspended when wind speeds

exceed a sustained velocity of 20 miles per hour in populated areas. Disturbed areas will be restored to original contours, and revegetated as outlined in the vegetation portion of this EA. Following seeding, woody debris cleared from the right of way (ROW) will be pulled back over the pipeline to increase effective ground cover and help retain soil moisture.

Construction equipment will be maintained in good operating condition to ensure that engines are running efficiently. Vehicles and construction equipment with emission controls will also be maintained to ensure effective pollutant emission reductions.

CULTURAL RESOURCES

Affected Environment: The proposed well tie pipeline has been inventoried at the Class III (100% pedestrian) level (M^{c}Donald 2006, Compliance Dated 8/3/2006) with only one historic resource recorded along the length of the proposed pipeline. The site is a portion of a historic irrigation ditch which is not NRHP eligible.

Environmental Consequences of the Proposed Action: Construction of the proposed pipeline will temporarily impact the historic irrigation ditch, which is not NRHP, eligible. There would be no significant or long term impacts to any known cultural resources from this project.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone,

with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

3. The operator/permittee must abide by private land owner concerns regarding construct through or repair of the irrigation ditch where the pipeline crosses the ditch

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The invasive alien cheatgrass (*Bromus tectorum*) occurs throughout the project area, primarily on areas of unrevegetated earthen disturbance associated with roads. Spotted knapweed occurs along the proposed pipeline route in the SW ¼ of Sec 24, T3S R96W. This infestation originated on the now abandoned Equity Oil location in the NENW Sec 25 and spread from that location and access road. The infestation and its satellites have been treated for about the past 15 years. Some mullein also occurs along the proposed route. Neither of these weeds have been eradicated in this area**.**

Environmental Consequences of the Proposed Action: The proposed action will create about 28 acres of earthen disturbance, which if it is not promptly revegetated with desirable species and treated with herbicides to eradicate noxious weeds/cheatgrass, will be invaded and dominated by noxious weeds/cheatgrass, increasing the potential for fire and the consequent further proliferation of cheatgrass. Noxious weeds could also establish from the existing seedbank and spread into the surrounding plant communities. The resulting proliferation of noxious weeds/cheatgrass will perpetuate a down ward cycle of environmental degradation that will be largely irreversible.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Due to the high likelihood of some remaining individuals of both spotted knapweed and mullein along the proposed ROW, the entire ROW in Sec 24 should be closely inspected and occurrences of the aforementioned two species should be identified and sprayed prior to construction (pretreated). In addition, because of the high likelihood that these species will occur following soil disturbance, the proponent should plan on spraying the pipeline ROW for at least three years post construction. Because of the necessity for herbicidal weed treatment, broadleaf and shrub species have been removed from the revegetation seed mixture.

The operator will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The operator will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

MIGRATORY BIRDS

Affected Environment: An array of migratory birds fulfill nesting functions in the project area's pinyon-juniper woodlands and mixed sagebrush/deciduous shrub communities from late May through early August. Species associated with these woodlands and shrublands are typical and widely represented in the Resource Area and region. Those bird populations identified as having higher conservation interest (i.e., Rocky Mountain Bird Observatory, Partners in Flight program) include Brewer's sparrow, green-tailed towhee, and Virginia's warbler in the shrubland types and gray flycatcher, pinyon jay, juniper titmouse, black-throated gray warbler, and violet-green swallow in the woodlands. These birds, too, are well distributed at appropriate densities in Piceance Basin's extensive like-habitats. Because nearly all the project area is situated immediately adjacent to existing forms of disturbance (i.e., road and pipeline corridors) and/or composed of sagebrush communities encroached with pinyon-juniper regeneration, neither sagebrush nor pinyon-juniper obligates attain full abundance or representation.

Environmental Consequences of the Proposed Action: The proposed project is scheduled for construction outside the migratory bird nesting season (August-September 2006), and as such, would have no effective influence on the reproductive functions of migratory birds. In the unlikely event construction is delayed significantly and occurred synchronous with the breeding season, this linear project would disturb relatively few nest attempts. Although right-of-way clearing would directly affect about 40 acres of mixed shrub habitat with variable stands of younger age-class, open-canopied pinyon-juniper, with few exceptions these habitats lie immediately adjacent to existing road and pipeline corridors. Woodland and sagebrush habitats in close proximity to existing roads and utility corridors tend to support low breeding bird densities and do not represent favorable nesting habitat for woodland raptors. In the worst case it is unlikely that more than 20 pair of high conservation birds would be involved. This level of impairment is discountable on a landscape scale as those species associated with these shrubland and woodland habitats are consistently some of the most abundant and/or widely distributed species in the Resource Area.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to disrupt the breeding activities of migratory birds or result in direct bird mortality.

Mitigation: None.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animals listed, proposed, or candidate to the Endangered Species Act, nor animals considered sensitive by the BLM, that are known to inhabit or derive important benefit from the areas potentially influenced by the proposed action. The younger age-class and/or open canopied woodlands affected by the project do not possess sufficiently well developed structure to offer suitable nest and roost substrate for several BLM sensitive species, including: northern goshawk and 3 species of bat (i.e., fringed and Yuma myotis, Thompson's big-eared). Based on BLM's experience in Piceance Basin, the potential for

goshawk nest activity in younger woodland habitats, on ridgeline crests, or within 200 feet of regularly traveled access corridors (virtually the entire project) is remote. Although BLM has no site-specific survey data to confirm the presence of bat roosting activity in this area, considering the nearly 250,000 acres of pinyon-juniper woodland in Piceance Basin, the involvement of woodland margins along pre-existing corridors is unlikely to have any substantive influence on the availability of roost substrate or the suitability of stands for bat roosting activity.

Environmental Consequences of the Proposed Action: Right-of-way clearing and pipeline installation would have no conceivable influence on special status species or associated habitat. Woodland clearing associated with the proposed action would lie adjacent to existing road/pipeline corridors and would involve approximately 4 acres of open-canopied ridgeline stands and about 13 acres of young pinyon-juniper encroachment of sagebrush disclimax communities. Alternative pad, access, and pipeline alignments in this area may be expected to increase the extent of mature woodland clearing as well as increase the interior involvement of contiguous woodland stands.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to influence special status species or associated habitats.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternatives would have no influence on populations or habitats of animals associated with the Endangered Species Act or BLM sensitive species and, as such, would have no influence on the status of applicable land health standards.

Although habitats directly affected by the proposed project have low potential to support special status animals, the general project vicinity currently meets the standard for mature woodland associates. Woodland clearing attributable to the project is situated parallel and immediately adjacent to existing road and pipeline corridors, thereby minimizing functional losses in habitat utility and extent. The proposed action would not substantively decrease woodland habitat continuity or extent or measurably influence the utility of adjacent woodlands for subsequent use by nesting goshawk or roosting bats and would not interfere with continued meeting of the standard.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)

Affected Environment: The proposed pipeline project is in the central portion of the Piceance Creek drainage. The vegetation consists of native Basin big sagebrush in the drainage bottoms; pinyon-juniper woodland and mountain shrub on the side slopes; and Douglas-fir woodland on steep slopes. Above 7500 feet in elevation, to the north of Piceance Creek, the vegetation changes to mountain shrub on the side slopes and ridge tops. Mountain big sagebrush is mixed with the mountain shrub vegetation at elevations above 7000 feet. Special Status plants, except for *Spiranthes diluvialis* (Ute's ladies'-tresses orchid), that are found in the

Piceance Creek basin all depend on relatively barren shale exposures of the Green River geologic formation. All areas within 100' of the proposed pipeline centerline were surveyed for Special Status plant species and habitat during the flowering season. The stream crossing was surveyed for *Spiranthes diluvialis* (Ute's ladies'-tresses orchid) during flowering. No Special Status plant species or its habitat was observed within the area of the proposed pipeline.

Environmental Consequences of the Proposed Action: None, since no plants or habitat was observed.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species. Thus there would be no effect on achieving the land health standard.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. Fuels, oils, and lubricants will be used during construction of the project, and solid waste (human waste, garbage, etc.) will be generated during construction activities. There are no known hazardous or other solid wastes along the project route. No hazardous wastes will be generated by construction of the project.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of. Accidental spills or leaks associated with equipment failures, refueling or maintenance of equipment, and storage of fuel, oil, or other fluids could cause soil, surface water and/or groundwater contamination. With implementation of the mitigation measures described below, impacts would be low and temporary.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The operator shall be required to collect and properly dispose of any solid wastes generated by this project. Hazardous materials will be used, stored, transported and/or disposed of in accordance with applicable federal and state laws. Construction areas will be maintained in a sanitary condition at all times and waste will be collected and disposed of at an appropriate waste disposal site.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed pipeline is located entirely within the Middle Piceance Creek watershed (fifth level watershed). Sixth and seventh level watersheds likely to be impacted by the proposed actions are Piceance Creek, Dry Fork Piceance Creek, King Gulch, Jones Gulch, Two Buck Gulch, Chimney Rock Gulch, Sprague Gulch, and Dry Thirteen Mile Creek watersheds. The proposed pipeline would cross one perennial stream (Piceance Creek) and up to four unnamed ephemeral tributaries to Piceance Creek. Piceance Creek is a perennial tributary to the White River which is a tributary to the Green River in Utah (tributary to the Colorado River).

Surface water quality in Piceance Creek is described as mixed bicarbonate in the upper drainages and as sodium bicarbonate in the lower drainages (BLM, 2003). Chemical components found in surface waters are attributed to the weathering of surficial materials in the area. The principal ionic constituents include sodium, calcium, magnesium, bicarbonate, sulfate, chloride, potassium, and fluoride (Tobin 1987). Sodium, bicarbonate, and sulfate levels generally decrease during the spring snowmelt runoff because of the increased amount of water, while chloride and fluoride remain essentially constant. Calcium and magnesium concentrations show small decreases, and potassium increases during the snowmelt. During the irrigation season, sodium becomes concentrated, and calcium and magnesium concentrations increase. Approximately eighty percent of annual flows in Piceance Creek originates as discharge from alluvial and bedrock aquifers (Tobin, 1987).

The "Status of Water Quality in Colorado –2006" (CDPHE 2006b) and Regulation No. 37 Classifications and Numeric Standards for Lower Colorado River Basin (CDPHE 2005a) were reviewed for information relating to drainages impacted by the proposed action. Table 1 shows the affected watersheds and associated water quality stream segments to be impacted by the proposed actions.

Table 1: White River Drainage Basin

Watershed	Stream segment	Use Protected	303(d) listed	M&E listed	Impairment	Severity
Piceance Creek	15	N/A	N/A	N/A	N/A	N/A
Dry Fork Piceance Creek	16	UP	N/A	N/A	N/A	N/A
King Gulch						
Jones Gulch						
Two Buck Gulch						
Dry Thirteen Mile Creek						
Sprague Gulch						
Chimney Rock Gulch						

Stream segment 15 of the White River Basin is defined as the mainstem of Piceance Creek from the Emily Oldland diversion dam to the confluence with the White River. Segment 15 has not been designated use-protected. An intermediate level of water quality protection applies to waters that have not been designated outstanding waters or use-protected waters. For these waters, no degradation is allowed unless deemed appropriate following an antidegradation

review. The state has classified segment 15 as being beneficial for the following uses: Warm aquatic life 2, Recreation 1b, and Agriculture.

Stream segment 16 of the White River Basin is defined as all tributaries to Piceance Creek, including all wetlands, lakes, and reservoirs, from the source to the confluence with the White River, except for the specific listings in segments 17, 19, and 20. The State has classified stream segment 16 as "Use Protected". The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. Stream segment 16 has been further designated by the state as being beneficial for the following uses: Warm Aquatic Life 2, Recreation 2, and Agriculture (CDPHE, 2006b).

Newly promulgated Colorado Regulations Nos. 93 and 94 (CDPHE 2006c and 2006d, respectively) were also reviewed for information related to the proposed project area drainages. Regulation No. 93 is the State's Section 303(d) list of water-quality-limited segments requiring Total Maximum Daily Loads (TMDLs). The 2006 303(d) list of segments needing development of TMDLs (CDPHE 2006c) includes two segments within the White River - segment 9b, specifically the Flag Creek portion (for impairment from selenium with a low priority for TMDL development) and segment 22, specifically West Evacuation Wash, and Douglas Creek (sediment impairments with a low priority for TMDL development). Regulation 94 is the State's list of water bodies identified for monitoring and evaluation (CDPHE 2006d), to assess water quality and determine if a need for TMDLs exists. The list includes two White River segments that are potentially impaired – 9 (Flag Creek-pH) and 22 (Soldier Creek- sediment).

ExxonMobil will purchase hydrostatic test water from a local surface or groundwater right holder or a municipality. ExxonMobil's construction contractor will be testing only new pipe and will not add any chemicals to the water during hydrostatic testing.

Access to location 396-24A1 (start of pipeline) would be by BLM road #1005 (Sprague Gulch), on which EnCana Oil & Gas (USA) Inc. was recently granted a right-of-way that authorized use of the road and road improvements for traffic associated with natural gas development. The impacts of that right-of-way authorization were treated in CO-110-2005-161-EA (July 26, 2005). A temporary improved low water crossing with a "hardened" creek bottom is currently being used at the Piceance Creek crossing of BLM 1005. Language in CO-110-2005-161-EA states that this temporary crossing will allow access to no more than 20 total pad locations. The use of BLM 1005 as a pipeline access was not discussed in CO-110-2005-161-EA. Because the proposed pipeline is a separate federal action associated with gas development in the Sprague Gulch watershed it will count against the 20 well pad quota for access from BLM 1005.

Ground Water: Surface geology along most of the proposed pipeline route location is Tertiary in age (Uinta Formation) and consists primarily of sandstone and siltstone. The Uinta Formation is the principle geologic formation of the Upper Piceance Basin Aquifer. Water quality of the Upper Piceance Basin Aquifer is generally characterized by dissolved calcium, magnesium, and bicarbonate along the rim of the Piceance Basin; and by sodium, magnesium, bicarbonate, and sulfate in the central part of the Basin (Tobin, 1987). The proposed pipeline route will also encounter alluvial material associated with the Piceance Creek Alluvial Aquifer in the drainage

bottom ware the proposed pipeline would cross RBC 5 and Piceance Creek prior to connecting into ExxonMobil's existing pipeline to the north. Alluvial aquifers are recharged by deeper ground water as well as infiltration of snowmelt and rain. Water quality in alluvial aquifers is primarily a function of local geology and communication with deeper groundwater in bedrock aquifers.

Environmental Consequences of the Proposed Action: Surface Water: The pipeline crossing of Piceance Creek will be bored as outlined in the proposed action. Boring beneath perennial water sources minimizes surface disturbance within the wetted perimeter preserving stream bank/channel stability and riparian communities. Ground water flow patterns may be temporarily modified during construction activities but should return to pre-construction conditions after reclamation is complete. Impacts to ephemeral streams would be limited to temporary alteration of beds and banks and possibly increased sediment load during initial storm events following construction.

Clearing, grading, and soil stockpiling activities may temporarily alter overland flow and natural groundwater recharge patterns. Near-surface soil compaction caused by construction equipment and vehicles could reduce the soil's ability to absorb water and could increase surface runoff and the potential for ponding. The magnitude and duration of potential impacts to surface runoff and groundwater recharge would depend on soil depth, soil type, vegetation type and density, slope, aspect, erosive force of rainfall or surface runoff, and duration and extent of construction activities. Impacts would likely be greatest immediately following commencement of construction activities and would naturally decrease thereafter due to reclamation activities.

Impacts resulting from discharge of hydrostatic test water on land could include soil erosion and subsequent degradation of water quality, including increased turbidity and sedimentation from hydrostatic test water runoff. If the CDPHE permit authorizes discharges directly into surface waters, high velocity flows could also cause erosion of stream banks and streambeds, resulting in a temporary increase in sediment load. Water discharges could also result in a change in water temperature and dissolved oxygen (DO) levels. DO levels decrease with increasing water temperature and could adversely impact aquatic life.

Environmental Consequences of the No Action Alternative: Impacts are not anticipated.

Mitigation: Comply with "Gold Book" fourth edition surface operating standards for pipeline constructing (copies of the "Gold Book" fourth edition can be obtained at the WRFO). In addition, the operator will restrict non emergency maintenance activities on pipeline ROW and associated access roads when soils become saturated to a depth of three inches or more. The operator will be responsible for complying with all local, state, and federal water quality regulations (such as but not limited to Phase I Storm Water Permit, Army Corps Section 404 permit coverage, and Industrial Wastewater/Produced Water Permits).

Surface Water: The operator will consult with the State of Colorado Water Quality Control Division regarding Stormwater Discharge Permits prior to commencing construction activities. Construction activities that disturb one acre or greater require a Stormwater Discharge Permit. Written documentation to the BLM Authorized Officer is required within 30 days of the APD

approval date to indicate that appropriate permits have been obtained. Written documentation may be a copy of the Stormwater Discharge Permit or an official verification letter from the State Water Quality Control Division to the operator that includes the Permit Certification Number. For further information contact Nate Dieterich, WRFO Hydrologist at 970-878-3831 or Nathan_Dieterich@blm.gov. Appropriate documents may be sent via electronic mail, faxed (970-878-3805), or mailed to Nate Dieterich at the above address.

To mitigate additional soil erosion along the pipeline ROW and reduce the potential increased sediment and salt loading to nearby surface waters, reclamation of all disturbed surfaces will immediately follow pipeline construction. Stockpiled topsoil and spoil piles will be separated to prevent mixing during reclamation efforts. Reclamation efforts will include (but will not be limited to) the following procedures:

1. Topsoil and spoil would be placed a minimum of 30 feet from the edge of any flowing water or ephemeral drainage. Erosion and sediment control measures will be installed adjacent to flowing water bodies to prevent flow of topsoil or spoil into them. Erosion and sediment control measures will be maintained until stream banks and adjacent upland areas are stabilized.
2. Stockpiled topsoil segregated from spoil piles will be replaced during reclamation in its respective original position (last out, first in) to minimize mixing of soil horizons.
3. Stockpiled soils (spoil and topsoil) will be pulled back over all disturbed surfaces and brought to back to near pre-construction contours.
4. The operator will ensure stockpiled topsoil is evenly distributed over the **top** of spoil used in re-contouring efforts.
5. All disturbed surfaces will be seeded with a BLM preferred seed mixture, and all slopes exceeding 5 % will be covered with wildlife friendly biodegradable fabrics (such as but not limited to Jute blankets, Curlex, …) to provide additional protection to topsoil and help retain soil moisture.
6. Water bars or dikes shall be constructed across the full width of the disturbed area.
7. Following seeding and placement of biodegradable fabrics, all available woody debris cleared during initial construction will be pulled back over the recontoured area to act as flow deflectors and sediment traps. Woody debris will be evenly distributed over the entire portion of the reclaimed area and will not account for more than 20% of total ground cover.
8. The operator will be required to monitor all reclaimed areas for signs of erosion and the presence of noxious and invasive plant species. If problems arise the operator will consult with the BLM for further assistance.
9. It will be the responsibility of the operator to continue revegetation/reclamation efforts until vegetative communities on all disturbed surfaces are composed of desirable seeded vegetation (as determined by the BLM).
10. Natural drainage patterns will be restored and stabilized with a combination of vegetative (seeding) and non-vegetative techniques (e.g. biodegradable fabrics, woody debris, straw waddles, etc).

Refueling and equipment maintenance will take place at least 100 feet from stream banks.

No operations using chemical processes or other pollutants in their activities will be allowed to occur within 200 feet of any water bodies.

Upon completion of each hydrostatic test section, the contractor will either pump the water into the next pipeline segment ready to be tested, discharge the water on land within the construction workspace, or discharge at a stream location authorized in the hydrostatic test water discharge permit to be obtained from the Water Quality Division of CDPHE. The operator will ensure that discharge water is filtered (e.g. silt fence, straw bails/waddles,…) before it reaches a stream course.

The pipeline will be buried to provide a minimum cover of 36 inches through normal terrain. The pipeline will be buried deep enough to avoid problems with irrigation ditches, potential irrigation areas and existing pipelines, as designated by the authorized officer. The pipeline shall be buried with a minimum of four feet of cover in alluvial areas.

Finding on the Public Land Health Standard for water quality: Stream segments 15 and 16 of the White River Basin currently meet water quality standards set by the state. Many of the upper tributaries which are ephemeral and flow in direct response to storm events do not meet the standards during periods of flow. With implementation of all suggested mitigation measures, water quality in the affected stream segments should continue to meet standards.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: There are no riparian or wetland communities associated with BLM-administered portions of this pipeline proposal. The proposed pipeline route would cross Piceance Creek, the largest perennial system in Piceance Basin. Stream condition and function in this predominantly privately-owned reach are heavily influenced by irrigation and livestock grazing practices.

Environmental Consequences of the Proposed Action: The project proponent and private landowner have negotiated a point for crossing Piceance Creek; BLM played no part in this decision. The proponent is proposing to bore beneath the creek, relieving the channel and bank features from any surface disturbance associated with pipeline installation. The proposed action would have no conceivable influence on on-site or downstream riparian or wetland communities.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any potential to influence on-site or downstream riparian or wetland communities.

Mitigation: None.

Finding on the Public Land Health Standard for riparian systems: The nearest BLM-administered channel lies over 25 stream miles downstream from the proposed crossing. Because the proposed action calls for boring beneath the Piceance streambed, the proposed (and no

action) alternative would have no conceivable influence on the condition or function of Piceance Creek, nor any influence on the status or trends associated with the land health standard.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, prime and unique farmlands, or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following data is a product of an order III soil survey conducted by the Natural Resources Conservation Service (NRCS) in Rio Blanco County, CO. Table 2 highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Table 2:

Soil Number	Soil Name	Slope	Acres w/in 30 m	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
6	Barcus channery loamy sand	2-8%	8.14	Foothills Swale	<2	Slow	Moderate	>60
15	**Castner channery loam**	**5-50%**	**52.26**	**Pinyon-Juniper woodlands**	**<2**	**Medium to rapid**	**Moderate to very high**	**10-20**
36	Glendive fine sandy loam		9.12	Foothills Swale	2-4	Slow	Slight	>60
40	Hagga loam		1.49	Swale Meadow	2-8	Slow	Slight	>60
42	Irigul channery loam	5-50%	19.37	Loamy Slopes	<2	Medium to rapid	Very high	10-20
43	Irigul-Parachute complex	12-45%5-30%	9.36	Loamy Slopes/Mountain Loam	<2	Rapid	Slight to high	10-20
58	Parachute Loam	25-75%	2.63	Brushy Loam	<2	Medium	Very high	20-40

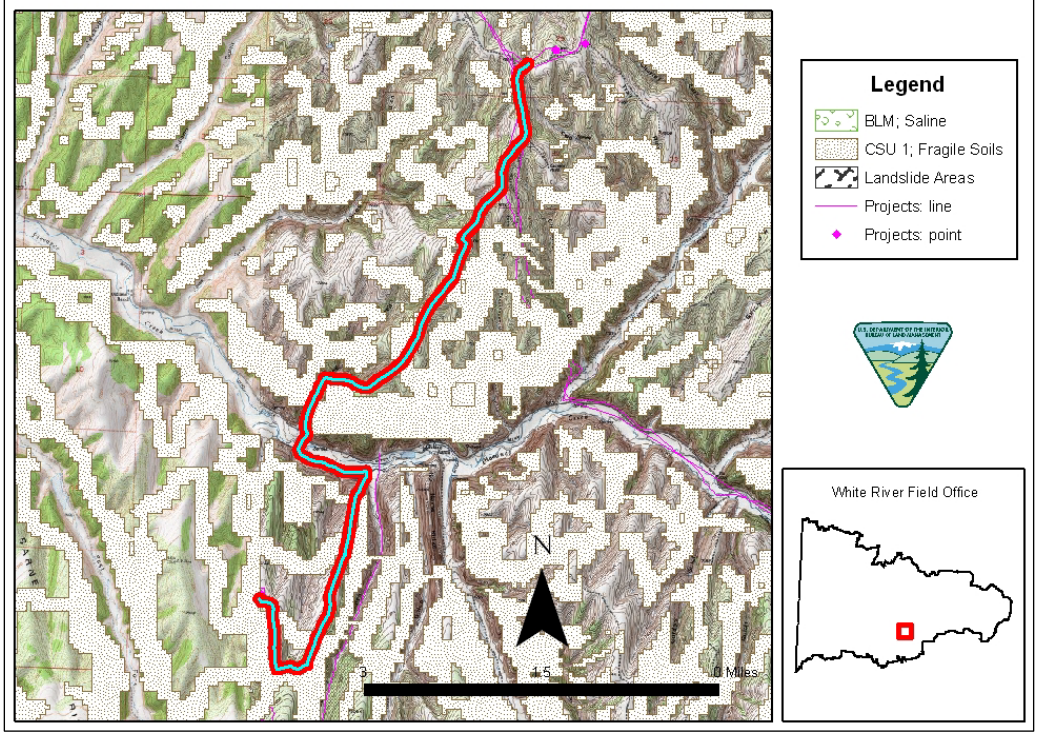
Soil Number	Soil Name	Slope	Acres w/in 30 m	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
70	**Redcreek-Rentsac complex**	**5-30%**	**35.69**	**PJ woodlands/PJ woodlands**	**<2**	**Very high**	**Moderate to high**	**10-20**
73	**Rentsac channery loam**	**5-50%**	**20.66**	**Pinyon-Juniper woodlands**	**<2**	**Rapid**	**Moderate to very high**	**10-20**
91	Torriorthents-Rock Outcrop complex	15-90%	5.83	Stoney Foothills		Rapid	Very high	10-20
96	Veatch channery loam	12-50%	18.51	Loamy Slopes	<2	Medium	Moderate to very high	20-40

Control Surface Use (CSU-1) "fragile soils" are mapped throughout the proposed pipeline route. As outlined in the White River ROD/RMP, All surface disturbing activities encountering "fragile soils" will be allowed only after an engineered construction/reclamation plan is submitted by the operator and approved by the Area Manager. The following items must be addressed in the plan:

- How soil productivity will be restored
- How surface runoff will be treated to avoid accelerated erosion such as riling, gullying, piping, and mass wasting.

Map 1, shows the locations where CSU-1 "fragile soils" will be encountered.

Map 1: **CSU-1 "fragile soils"**



Environmental Consequences of the Proposed Action: Clearing and grading of the pipeline right of way will remove protective vegetative cover from the affected soils accelerating the erosion process. Construction activities may result in soil compaction which would decrease infiltration rates increasing potential for erosive overland flows. Grading, trenching, and backfilling activities could cause mixing of the soil horizons and could result in reduced soil fertility reducing revegetation potential. Nearly 90% of all affected soils exhibit erosion potentials ranging from moderate-high/very high. As a result, water erosion of soils associated with construction activities will likely result in a net loss of valuable topsoil by sheet, rill, and gully erosion. Eroded topsoil and subsoil may increase salt loading (Hagga Loam and Glendive fine sandy loam) and sedimentation to surface waters down gradient of disturbed areas. Increased sedimentation/salt loads could adversely impact water quality and aquatic life.

Any leaks or spills of environmentally unfriendly substances (e.g. diesel fuel) could compromise the productivity of affected soils. Decreased soil productivity will hinder reclamation efforts and leave soils further exposed to erosional processes.

Environmental Consequences of the No Action Alternative: None

Mitigation: All surface disturbing activities encountering "fragile soils" will be allowed only after an engineered construction/reclamation plan is submitted by the operator and approved by the Area Manager. The following items must be addressed in the plan:

- How soil productivity will be restored
- How surface runoff will be treated to avoid accelerated erosion such as riling, gullying, piping, and mass wasting.

The operator will be responsible for segregating topsoil material and backfilling of topsoil in its respective original position (last out, first in) to assist in the reestablishment of soil health and productivity.

Erosion and sediment control measures will be installed on all slopes exceeding five percent to mitigate soil loss. Erosion and sediment control measures will be maintained until stream banks and adjacent upland areas are stabilized.

All disturbed surfaces will be restored to natural contours and revegetated with a BLM approved seed mixture.

Finding on the Public Land Health Standard for upland soils: Infiltration and permeability rates will be reduced with increased soil compaction. Following proper mitigation techniques and reclamation procedures, soil health will remain unchanged from current conditions.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed action occurs primarily in Pinyon/ mixed mountain shrub vegetation. Dominant shrub species include mountain big sagebrush, Utah serviceberry, mountain mahagony and snowberry. Due to historical fire suppression, pinyons are increasingly

dominant in the plant community and are suppressing desirable shrub and grass production. The predominant ecological sites in the project area are Loamy Slopes and pinyon-juniper woodland.

Environmental Consequences of the Proposed Action: The principal impact to vegetation will be complete removal of vegetation on the pipeline and the earthen disturbance associated with it. In terms of plant community composition, structure and function, the principal negative impact over the long term would occur if invasive species or noxious weeds are allowed to establish and proliferate on the disturbed areas resulting from pipeline and access road construction.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly revegetate all disturbed areas with Native Seed mix #3. Revegetation operations will commence immediately after construction and will not be delayed until the following fall. Woody debris will not be scattered on the pipeline until after seeding operations are completed. Seed mixture rates are Pure Live Seed (PLS) pounds per acre. Drill seeding is the preferred method of application.

Seed Mix #	Species (Variety)	Lbs. PLS per Acre	Ecological Sites
3	Western wheatgrass (Rosanna) Bluebunch wheatgrass (Secar) Thickspike wheatgrass (Critana) Indian ricegrass (Nezpar) Fourwing saltbush (Wytana) Utah sweetvetch Alternates: Needle and thread	2 2 2 1 1 1	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany)

If construction/development occurs between April 15 and November 15, the operator will be required to water and/or surface access roads to reduce airborne dust and damage to roadside/pipeline vegetation communities.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Upland plant communities in the project area currently meet the Standard and are expected to continue to meet the Standard in the future following project implementation if mitigation is properly applied.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There are no aquatic communities associated with BLM-administered portions of this pipeline proposal. The proposed pipeline route would cross Piceance Creek, the largest perennial system in Piceance Basin, on private lands. Stream condition and function in this predominantly privately-owned reach are heavily influenced by irrigation and livestock grazing practices, but the system persists in supporting small populations of speckled dace, flannelmouth suckers, and leopard frogs.

Environmental Consequences of the Proposed Action: The proposed action would have no effective influence on on-site or downstream aquatic communities. The project proponent and private landowner have negotiated a point for crossing Piceance Creek; BLM played no part in this decision. The proponent is proposing to bore beneath the creek, relieving the channel and bank features from any surface disturbance associated with pipeline installation. With the application of reclamation and BMPs associated with soil erosion there is no reasonable likelihood that fugitive sediments would have any influence on the function or condition of the Piceance Creek channel or its associated aquatic values.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any direct or indirect influence on downstream aquatic habitat.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): The nearest BLM-administered channel lies over 25 stream miles downstream from the proposed crossing. Because the proposed action calls for boring beneath the Piceance streambed, the proposed (and no action) alternative would have no effective influence on the condition or function of the Piceance Creek channel, its aquatic habitat values, or on the status or trends associated with the land health standard.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The project area is encompassed by general winter ranges of deer and elk. Elk use these lands throughout the winter, but deer use is typically most prevalent from October through January and again in April and May. Road density-related impacts to big game (i.e., elevated energy demands, habitat disuse) received prominent address in the White River RMP. Analysis of the issue resulted in the development of a land use decision which established an effective road density objective of 3 miles per square mile on big game winter ranges.

Pinyon-juniper stands potentially affected by the proposed action are represented by young trees encroaching sagebrush disclimax communities or open-canopied stands, neither of which are known to support woodland raptor nesting activities (e.g., Cooper's and sharp-shinned hawk and long-eared owl). Based on BLM's experience, woodland nesting raptors also tend to avoid selecting nest sites along ridgeline crests and in close proximity to breaks in canopy (e.g., existing road and pipeline corridors). The area potentially influenced by the proposed action is fettered by these constraints and it is highly improbable that any raptor nests would be directly influenced by right-of-way clearing. Other small and nongame mammals and birds using this area are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado; there are no narrowly endemic or highly specialized species known to inhabit those lands potentially influenced by this action.

Environmental Consequences of the Proposed Action: Cleared right-of-ways often support unauthorized vehicle use once reclamation is complete. Increasing road density

aggravates the intensity and extent of big game issues involving avoidance (e.g., inefficient use of forage and cover resources) and harassment (e.g., increased energetic costs). However, because this action parallels existing access or involves considerable privately controlled points of access, there would be virtually no effective long term increase in the intensity and frequency of road development or use outside construction. One exception involves a 400-meter cross-country ROW segment in the N1/2SE1/4 section 12 T3S R96W that originates on Public Land and extends west from the existing ridgeline road as the ROW begins its descent into King Gulch. As described below, the proponent will be responsible for employing the means to effectively deter subsequent vehicular travel (including ATVs) on that portion of the right-of-way that deviates from positions immediately adjacent to existing roads through the life of the project.

The extent and location of woody clearing activity (about 32 acres) would represent a minor and, assuming successful interim reclamation, shorter-term reduction in the herbaceous forage base for all resident wildlife. Redevelopment of an effective shrub canopy (e.g., woody forage base for big game and nest/forage base for nongame animals) would likely span several decades after reclamation, but reductions in the local availability of woody forage and cover would be minor and discountable relative to the surrounding resource base, especially since nearly all disturbances are situated along an established road where habitat utility is presently compromised to some degree. It is unlikely that the proposed action would have any negative impacts on breeding raptors. Construction of the project involves little if any disturbances of suitable woodland nest substrate. Scheduled construction activity would occur outside the raptor nesting season such that subsequent nest attempts in adjacent stands would not be adversely influenced.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have potential to affect resident wildlife populations or associated habitat.

Mitigation: In the event ROW preparation, pipeline installation, or ROW reclamation operations involve the raptor nesting season (i.e., 1 March through 15 August), the proposed pipeline route will require a raptor nest survey of suitable cliff and woodland habitats potentially affected by these actions. In the event the proponent chooses to expedite this clearance through the use of environmental consultants, raptor nest surveys must be conducted by qualified biologists with demonstrated knowledge in raptor biology and identification and experience in conducting nest surveys in appropriate habitats using most current BLM-WRFO survey protocols (obtained through BLM-WRFO wildlife staff).

That cross-country ROW segment, as described below, will be physically conditioned to effectively preclude all subsequent vehicle use (including ATVs) over the life of the project. This work shall be conducted immediately after prescribed reclamation has been completed. The ROW to be conditioned is that ~400-meter segment in the N1/2SE1/4 section 12 T3S R96W which extends west from the existing ridgeline road as the ROW begins its descent into King Gulch.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The land health standard for animal communities is currently

being met across the proposed project area. Project implementation would, with effective reclamation, have no lasting consequence on the utility or suitability of habitat as a source of forage or cover for local big game and non-game animal populations. The no-action or proposed action alternatives would not detract from continued meeting of this standard.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation	X		
Cadastral Survey	X		
Fire Management			X
Forest Management			X
Geology and Minerals		X	
Hydrology/Water Rights			X
Law Enforcement		X	
Noise	X		
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: Open seasonally, traverses adjacent to existing unmaintained two-track route. This two-track may receive some use during hunting season

Environmental Consequences of the Proposed Action: While some short term disruption to travelers could occur during construction, the presence of the buried pipeline would no effect of alter current uses of the road. There would be no reduction or improvement to the access picture in the area.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

FIRE MANAGEMENT

Affected Environment: The proposed pipeline involves approximately 13,943 feet of right-of-way clearing for an approximate total of 16 acres of disturbance. Due to the existing tree cover of pinion and juniper there will be a need for the operator to clear some of these trees.

Environmental Consequences of the Proposed Action: There will be approximately 16 acres of right-of-way construction requiring the removal of pinion/juniper fuel type on the proposed r-o-w. The volume of material is not expected to create wildfire control problems or unnatural fuels buildup following treatment as described in the mitigation below.

Environmental Consequences of the No Action Alternative: None

Mitigation: For material brought back onto the pipeline r-o-w the material should be evenly scattered, so as to not create jackpots, and the material should not exceed 5 tons /acre.

FOREST MANAGEMENT

Affected Environment: The majority of the proposed pipeline is on existing trails or other disturbance. The woodlands encountered along the project route are immature pinyon/juniper type with seedling and sapling trees. These trees are used locally for transplants and for Christmas trees.

Environmental Consequences of the Proposed Action: The proposed action would disturb approximately 16 acres of immature pinyon/juniper woodland. The volume of wood products is considered insignificant and does not require the permit holder to purchase products prior to construction.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: As stated in the Fire Management Section.

HYDROLOGY AND WATER RIGHTS

Affected Environment: The proposed pipeline is located entirely within the Middle Piceance Creek watershed (fifth level watershed). Sixth and seventh level watersheds likely to be impacted by the proposed actions are Piceance Creek, Dry Fork Piceance Creek, King Gulch, Jones Gulch, Two Buck Gulch, Chimney Rock Gulch, Sprague Gulch, and Dry Thirteen Mile Creek watersheds. The proposed pipeline would cross one perennial stream (Piceance Creek) and up to four unnamed ephemeral tributaries to Piceance Creek. Piceance Creek is a perennial tributary to the White River which is a tributary to the Green River in Utah (tributary to the Colorado River).

Stream flows in Piceance Creek and its tributaries generally peak in mid spring as a result of high elevation snowmelt and periodically during late summer and early fall in response to high intensity precipitation events. Ephemeral drainages flow only in direct response to snowmelt and

intense summer and early autumn storms. Approximately 98% of the precipitation in the Piceance Basin is lost to evapotranspiration. The remaining water runs off rapidly and replenishes streamflow or recharges bedrock and alluvial aquifers. Ground water recharge areas generally are located in higher parts of the drainage basin. The recharge moves slowly laterally and downward into the upper aquifer system, passes through the Mahogany zone (leaky confining unit) and enters the lower aquifer system through fractures and solution openings. The water in the upper and lower aquifers moves horizontally through the basin to the discharge areas. In the Piceance drainage basin, the water eventually moves upward back through the aquifer system where it discharges into the valley-fill alluvial aquifer or emerges as springs in the stream valleys (Taylor 1987). No BLM springs or water wells have been identified within 0.5 miles of any surface disturbing activities associated with the proposed actions.

The stream banks of Piceance Creek are generally composed of sand, silt, and clay particles that are less than about one-tenth of an inch in diameter. The bank materials erode easily when stream discharge increases during peak flow conditions. Bank erosion is probably most prominent during the spring snowmelt when high flows persist for several days. The bank material absorbs a large amount of water, becomes soft and easily removable, and sloughs into the stream in large clumps. The stream bed of Piceance Creek is composed of silt, sand, gravel, and occasional cobbles, with pockets of fine material where the velocity of the stream generally is slow. Coarse streambed materials normally move only under peak flow conditions (Norman 1987).

One perennial BLM spring has been identified within 400 meters of the proposed pipeline route. Basic water rights and water quality data for BLM spring 171-14 are outlined in Table 3, below.

Table 3:

Map Code	Qtr	Sec #	Twp	Range	Water Right Case #	SC	pH	Q (gpm)	Use type	Date Meas
171-14	SENE	23	3S	96W	96CW0337	1542	7.9	0.41	9W (livestock/ wildlife)	9/26/83

Environmental Consequences of the Proposed Action: Improper drainage from pipeline rights of ways will elevate sediment production from disturbed areas. Increased sediment loads to local surface water drainages will result in a sediment rich system. Sediment rich systems are characterized by deposition and high width to depth ratios (W/D ratio) (wide shallow channels). As the W/D ratio increases, the hydraulic stress against the banks also increases and bank erosion is accelerated. Increases in the sediment supply to the channel develop from bank erosion, reducing the systems capability to transport sediment. As a result, deposition occurs, further accelerating bank erosion (Rosgen, 1996).

Construction activities may disrupt natural surface and ground water flow patterns. Altered flow patterns could disrupt natural surface and ground water recharge/discharge patterns. Changes to natural recharge/discharge patterns could have adverse impacts on stream channel morphology, productivity of alluvial wells and springs (BLM 171-14), riparian areas and aquatic life.

Environmental Consequences of the No Action Alternative: None

Mitigation: Refer to mitigation in the Water Quality portion of this document.

PALEONTOLOGY

Affected Environment: The majority of the proposed pipeline, all but about .25 miles of the line, are located in an area that is generally mapped as the Uinta Formation (Tweto 1979) which the BLM, WRFO has classified as a Condition I formation meaning it is known to produce scientifically important fossil resources. The remaining portion of the proposed pipeline is located in what is mapped as Quaternary Alluvium (Tweto 1979) which is not generally considered to be fossiliferous.

Environmental Consequences of the Proposed Action: If it becomes necessary to excavate into the underlying rock formations, at any time, to bury the pipeline there is a high potential to impact fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. All exposed outcrops of the Uinta Formation must be inventoried by an approved paleontologist with a report detailing the results of the inventory plus any recommended mitigation submitted to the BLM prior to the initiation of any construction. Additional mitigation measures may be required.

3. All excavation into the underlying rock formation must be monitored by an approved paleontologist. The paleontologist shall be present before and during all excavation into the

underlying rock formation. A decision to reduce monitoring by the paleontologist must be discussed with the Authorized Officer and supported.

RANGELAND MANAGEMENT

Affected Environment: The proposed action is within the Dan and Cheryl Johnson use area of the Piceance Mountain allotment (06023) and the Oldland Brothers winter use area of the Little Hills allotment (06006). Their respective grazing use is as follows:

Allotment Number	Allotment Name	Permit Number	Livestock #'s	Kind	Dates of Use	% PL	AUMs	Rotation Schedule
06006	Little Hills-Oldland Bros.	051409	383	C	11/01-11/30	100	378	03/15-06/20 Yearly 04/10-07/05 1 in 2
			840	C	12/01-12/31	100	856	
			404	C	01/01-01/31	100	412	
06023	Piceance Mountain - Dan & Cheryl Johnson	051421	580	C	05/01-06/20	59	574	03/25-06/15 1 in 3 04/20-07/10 1 in 3 04/25-08/01 1 in 3
			353	C	10/16-11/14	59	205	
			177	C	11/15-01/30	59	264	

The proposed pipeline will cross the King Gulch pasture fence in the SWNE Sec 24 T 3S R96W and the Little Hills Winter Fence in the NWSW Sec 32 T 2S R 95W. Both these fences are necessary to achieve land use plan vegetation management objectives and to prevent inter allotment livestock trespass.

Environmental Consequences of the Proposed Action: The vegetation disturbance from pipeline construction would result in the short term loss of 5 AUMs of livestock forage. An additional loss of 10-20 AUMs could be caused by dust coating vegetation adjacent to the pipeline and access roads. Failure to repair fences could result in livestock trespass and not meeting vegetation management objectives for the affected allotments. Prompt and effective revegetation of the pipeline will result in a slight increase in forage productivity for the pipeline itself, particularly if the aforementioned noxious weeds are controlled or eradicated

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: All fences crossed by an access road / pipeline will have a cattleguard installed and maintained to BLM specifications for the lifetime of the project. All cattleguard/fence work will take place prior to well location and pipeline construction.

Any and all fences intersected by the pipeline will be braced to BLM specifications prior to cutting. A temporary wire gate will be constructed. This work will take place prior to pipeline

ROW construction. A copy of the applicable BLM fence specifications will be included as part of the conditions of approval.

If construction/development occurs between April 15 and November 15, the operator will be required to water and/or surface access roads to reduce airborne dust and damage to roadside/pipeline vegetation communities.

REALTY AUTHORIZATIONS

Affected Environment: A pipeline is needed in order to transport gas from the Liberty Unit 396-24A1 well to a connection into an existing line in the Piceance Creek Unit on the north side of Piceance Creek.

Environmental Consequences of the Proposed Action: The proposed action is for the construction, operation, and maintenance of a four-inch buried gas pipeline to transport gas from the Liberty Unit 396-24A well. There are several existing rights-of-way in the project area:

COC67627	RB County	County Road 3
COC69027	XTO Energy	Access Road
COC69028	XTO Energy	Pipeline
COC043572	Canyon Gas	Pipeline
COC4368	White River Electric	Power line
COC018388	Xcel Energy	Pipeline
COC0123685	Questar	Main Line 68 pipeline
COC048809	Questar	Pipeline
COC667	White River Electric	Power line

Environmental Consequences of the No Action Alternative: Under the no action alternative the application would be denied and a different source of gas transport would have to be found.

Mitigation: 1. The Colorado One Call procedure will be implemented before any surface disturbance takes place.

2. The holder shall meet Federal, State, and local emission standards for air quality.

3. The holder shall furnish and apply water or use other means satisfactory to the authorized officer for dust control.

4. The holder shall comply with the construction practices and mitigating measures established by 33 CFR 323.4, which sets forth the parameters of the "nationwide permit" required by Section 404 of the Clean Water Act. If the proposed action exceeds the parameters of the nationwide permit, the holder shall obtain an individual permit from the appropriate office of the Army Corps of Engineers and provide the authorized officer with a copy of same. Failure to comply with this requirement shall be cause for suspension or termination of this right-of-way grant.

5. The holder shall survey and clearly mark the centerline and/or exterior limits of the right-of-way prior to any surface disturbing activity, as determined by the authorized officer.

6. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).

7. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.

8. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil shall be deemed too wet to adequately support construction equipment.

9. The holder shall inform the authorized officer within 48 hours of any accidents on federal lands that require reporting to the Department of Transportation as required by 49 CFR Part 195.

10. The holder is prohibited from discharging oil or other pollutants into or upon the navigable waters of the United States, adjoining shorelines, or the waters of the contiguous zone in violation of Section 311 of the Clean Water Act as amended, 33 U.S.C. 1321, and the regulations issued thereunder, or applicable laws of the State(s) of xx and regulations issued thereunder. Holder shall give immediate notice of any such discharge to the authorized officer and such other Federal and State officials as are required by law to be given such notice.

11. Prior to any discharge, hydrostatic testing water will be tested and processed, if necessary, to ensure that the water meets local, State or Federal water quality standards. Prior to discharge of hydrostatic testing water from the pipeline, the holder shall design and install a suitable energy dissipater at the outlets, and design and install suitable channel protection structures necessary to ensure that there will be no erosion or scouring of natural channels within the affected watershed as a result of such discharge. The holder will be held responsible for any erosion or scouring resulting from such discharge. Sandbags, rock, or other materials or objects installed shall be removed from the site upon completion of hydrostatic testing.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project areas area has been delineated/most resembles a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: The public will lose approximately 30 acres of dispersed recreation potential while pipeline is being constructed. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likelihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed action would be in an area with a VRM III classification. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action would create linear disturbance on both sides of RBC 5 (Piceance Creek Road) as the pipeline route descends and ascends hills on either side of the route traveled by a casual observer. This linear disturbance would be in the form of change in the vegetation type of native vegetation. The proposed action would attract attention briefly as a casual observer passed by on this route. By painting all above ground facilities juniper green to mimic the surrounding vegetation, the level

of change to the characteristic landscape would be less than moderate and the objectives of the VRM III classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no environmental consequences.

Mitigation: All permanent structures, facilities and equipment placed above ground shall be painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.

CUMULATIVE IMPACTS SUMMARY: This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of energy related development are addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action.

REFERENCES CITED:

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Colorado Oil and Gas Conservation Commission (COGCC). Reclamation Regulations. Accesses online at http://oil-gas.state.co.us/RR_Asps/1000-ser.pdf. Accessed July 2006.

Bureau of Land Management (BLM). 2003. Shell Frontier Oil and Gas, Inc. Bureau of Land Management Land Exchange Environmental Assessment. CO-WRFO-O2-062-EA. White River Field Office, Meeker, CO.

M^{c}Donald, Kae
2006 ExxonMobil Corporation Liberty Unit 396-24A Pipeline, A Class III Cultural Resource Inventory, Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Norman, V. 1987. Suspended Sediment in the Piceance Basin, in Taylor, J., ed., Oil Shale, Water Resources, and Valuable Minerals of the Piceance Basin, Colorado: The Challenge and Choices of Development. US Geol. Surv. Prof. Paper 1310.

Rosgen, Dave. 1996. Applied River Morphology. Wildland Hydrology, Pagosa Springs, Colorado: 5-21 pp.

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Tweto, Ogden
1979 Geologic Map of Colorado. United Stated Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality, Water Quality, Surface and Ground Hydrology and Water Rights, Soils
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources, Paleontological Resources
Mark Hafkenschiel	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation, Rangeland Management
Ed Hollowed	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Wildlife Terrestrial and Aquatic, Wetlands and Riparian Zones
Melissa J. Kindall	Range Technician	Wastes, Hazardous or Solid; Wild Horses
Chris Ham	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Penny Brown	Realty Specialist	Realty Authorizations
Keith Whitaker	Natural Resource Specialist	Visual Resources

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2006-125-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the proposed action with the below listed mitigation measures.

MITIGATION MEASURES:

1. The holder will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive particulate matter (fugitive dust) from associated access roads, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. In addition, the application of a BLM approved dust suppressant (e.g. water or chemical stabilization methods) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph. Surfacing access roads with gravels will also help mitigate production of fugitive particulate matter. Land clearing, grading, earth moving or excavation activities will be suspended when wind speeds exceed a sustained velocity of 20 miles per hour in populated areas. Disturbed areas will be restored to original contours, and revegetated as outlined in the vegetation portion of this EA. Following seeding, woody debris cleared from the ROW will be pulled back over the pipeline to increase effective ground cover and help retain soil moisture.

2. Construction equipment will be maintained in good operating condition to ensure that engines are running efficiently. Vehicles and construction equipment with emission controls will also be maintained to ensure effective pollutant emission reductions.

3. The holder is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the holder is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the holder as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the holder wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the holder will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the holder will then be allowed to resume construction.

4. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

5. The operator/permittee must abide by private land owner concerns regarding construct through or repair of the irrigation ditch where the pipeline crosses the ditch.

6. Due to the high likelihood of some remaining individuals of both spotted knapweed and mullein along the proposed ROW, the entire ROW in Sec 24 should be closely inspected and occurrences of the aforementioned two species should be identified and sprayed prior to construction (pretreated). In addition, because of the high likelihood that these species will occur following soil disturbance, the proponent should plan on spraying the pipeline ROW for at least three years post construction. Because of the necessity for herbicidal weed treatment, broadleaf and shrub species have been removed from the revegetation seed mixture.

7. Promptly revegetate all disturbed areas with Native Seed mix #3. Revegetation operations will commence immediately after construction and will not be delayed until the following fall. Woody debris will not be scattered on the pipeline until *after* seeding operations are completed. Seed mixture rates are Pure Live Seed (PLS) pounds per acre. Drill seeding is the preferred method of application

Seed Mix #	Species (Variety)	Lbs. PLS per Acre	Ecological Sites
3	Western wheatgrass (Rosanna) Bluebunch wheatgrass (Secar) Thickspike wheatgrass (Critana) Indian ricegrass (Nezpar) Fourwing saltbush (Wytana) Utah sweetvetch Alternates: Needle and thread	2 2 2 1 1 1	Gravelly 10"-14", Pinyon/Juniper Woodland, Stony Foothills, 147 (Mountain Mahogany)

8. If construction/development occurs between April 15 and November 15, the operator will be required to water and/or surface access roads to reduce airborne dust and damage to roadside/pipeline vegetation communities.

9. The holder will monitor the right of way for a minimum of five years post construction to detect the presence of noxious and invasive species. The holder will be responsible for eradication of noxious weeds and cheatgrass on the right of way using materials and methods authorized in advance by the Field Manager.

10. The holder shall be required to collect and properly dispose of any solid wastes generated by this project. Hazardous materials will be used, stored, transported and/or disposed of in accordance with applicable federal and state laws. Construction areas will be maintained in a sanitary condition at all times and waste will be collected and disposed of at an appropriate waste disposal site.

11. Comply with "Gold Book" fourth edition surface operating standards for pipeline constructing (copies of the "Gold Book" fourth edition can be obtained at the WRFO). In addition, the holder will restrict non-emergency maintenance activities on pipeline ROW and associated access roads when soils become saturated to a depth of three inches or more. The holder will be responsible for complying with all local, state, and federal water quality regulations (such as but not limited to Phase I Storm Water Permit, Army Corps Section 404 permit coverage, and Industrial Wastewater/Produced Water Permits).

Surface Water: The holder will consult with the State of Colorado Water Quality Control Division regarding Stormwater Discharge Permits prior to commencing construction activities. Construction activities that disturb one acre or greater require a Stormwater Discharge Permit. Written documentation to the BLM Authorized Officer is required within 30 days of the APD approval date to indicate that appropriate permits have been obtained. Written documentation may be a copy of the Stormwater Discharge Permit or an official verification letter from the State Water Quality Control Division to the operator that includes the Permit Certification Number. For further information contact Nate Dieterich, WRFO Hydrologist at 970-878-3831 or Nathan_Dieterich@blm.gov. Appropriate documents may be sent via electronic mail, faxed (970-878-3805), or mailed to Nate Dieterich at the above address.

12. To mitigate additional soil erosion along the pipeline ROW and reduce the potential increased sediment and salt loading to nearby surface waters, reclamation of all disturbed surfaces will immediately follow pipeline construction. Stockpiled topsoil and spoil piles will be separated to prevent mixing during reclamation efforts. Reclamation efforts will include (but will not be limited to) the following procedures:

13. Topsoil and spoil would be placed a minimum of 30 feet from the edge of any flowing water or ephemeral drainage. Erosion and sediment control measures will be installed adjacent to flowing waterbodies to prevent flow of topsoil or spoil into them. Erosion and sediment control measures will be maintained until stream banks and adjacent upland areas are stabilized.

14. Stockpiled topsoil segregated from spoil piles will be replaced during reclamation in its respective original position (last out, first in) to minimize mixing of soil horizons.

15. Stockpiled soils (spoil and topsoil) will be pulled back over all disturbed surfaces and brought to back to near pre-construction contours.

16. The holder will ensure stockpiled topsoil is evenly distributed over the **top** of spoil used in re-contouring efforts.

17. All disturbed surfaces will be seeded with a BLM preferred seed mixture, and all slopes exceeding 5 % will be covered with wildlife friendly biodegradable fabrics (such as but not limited to Jute blankets, Curlex, …) to provide additional protection to topsoil and help retain soil moisture.

18. Water bars or dikes shall be constructed across the full width of the disturbed area.

19. Following seeding and placement of biodegradable fabrics, all available woody debris cleared during initial construction will be pulled back over the recontoured area to act as flow deflectors and sediment traps. Woody debris will be evenly distributed over the entire portion of the reclaimed area and will not account for more than 20% of total ground cover.

20. The holder will be required to monitor all reclaimed areas for signs of erosion and the presence of noxious and invasive plant species. If problems arise the holder will consult with the BLM for further assistance
.
21. It will be the responsibility of the holder to continue revegetation/reclamation efforts until vegetative communities on all disturbed surfaces are composed of desirable seeded vegetation (as determined by the BLM).

22. Natural drainage patterns will be restored and stabilized with a combination of vegetative (seeding) and non-vegetative techniques (e.g. biodegradable fabrics, woody debris, straw waddles, etc).

23. Refueling and equipment maintenance will take place at least 100 feet from stream banks. No operations using chemical processes or other pollutants in their activities will be allowed to occur within 200 feet of any water bodies.

24. Upon completion of each hydrostatic test section, the contractor will either pump the water into the next pipeline segment ready to be tested, discharge the water on land within the construction workspace, or discharge at a stream location authorized in the hydrostatic test water discharge permit to be obtained from the Water Quality Division of CDPHE. The holder will ensure that discharge water is filtered (e.g. silt fence, straw bails/waddles,…) before it reaches a stream course.

25. The pipeline will be buried to provide a minimum cover of 36 inches through normal terrain. The pipeline will be buried deep enough to avoid problems with irrigation ditches, potential

irrigation areas and existing pipelines, as designated by the authorized officer. The pipeline shall be buried with a minimum of four feet of cover in alluvial areas.

26. All surface disturbing activities encountering "fragile soils" will be allowed only after an engineered construction/reclamation plan is submitted by the holder and approved by the Field Manager. The following items must be addressed in the plan:

- How soil productivity will be restored?
- How surface runoff will be treated to avoid accelerated erosion such as riling, gullying, piping, and mass wasting?

27. Erosion and sediment control measures will be installed on all slopes exceeding five percent to mitigate soil loss. Erosion and sediment control measures will be maintained until stream banks and adjacent upland area are stabilized.

28. In the event ROW preparation, pipeline installation, or ROW reclamation operations involve the raptor nesting season (i.e., 1 March through 15 August), the proposed pipeline route will require a raptor nest survey of suitable cliff and woodland habitats potentially affected by these actions. In the event the proponent chooses to expedite this clearance through the use of environmental consultants, raptor nest surveys must be conducted by qualified biologists with demonstrated knowledge in raptor biology and identification and experience in conducting nest surveys in appropriate habitats using most current BLM-WRFO survey protocols (obtained through BLM-WRFO wildlife staff).

29. That cross-country ROW segment, as described below, will be physically conditioned to effectively preclude all subsequent vehicle use (including ATVs) over the life of the project. This work shall be conducted immediately after prescribed reclamation has been completed. The ROW to be conditioned is that ~400-meter segment in the N1/2SE1/4 section 12 T3S R96W which extends west from the existing ridgeline road as the ROW begins its descent into King Gulch.

30. For material brought back onto the pipeline right-of-way should be evenly scattered, so as to not create jackpots and the material should no exceed 5 tons/acre.

31. The holder is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the holder as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the holder wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the holder will be responsible for mitigation cost. The AO will provide technical and procedural guidelines

for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

32. All exposed outcrops of the Uinta Formation must be inventoried by an approved paleontologist with a report detailing the results of the inventory plus any recommended mitigation submitted to the BLM prior to the initiation of any construction. Additional mitigation measures may be required.

33. All excavation into the underlying rock formation must be monitored by an approved paleontologist. The paleontologist shall be present before and during all excavation into the underlying rock formation. A decision to reduce monitoring by the paleontologist must be discussed with the Authorized Officer and supported.

34. All fences crossed by an access road / pipeline will have a cattleguard installed and maintained to BLM specifications for the lifetime of the project. All cattleguard/fence work will take place prior to well location and pipeline construction.

35. Any and all fences intersected by the pipeline will be braced to BLM specifications prior to cutting. A temporary wire gate will be constructed. This work will take place prior to pipeline ROW construction. A copy of the applicable BLM fence specifications will be included as part of the conditions of approval.

36. If construction/development occurs between April 15 and November 15, the holder will be required to water and/or surface access roads to reduce airborne dust and damage to roadside/pipeline vegetation communities.

37. The Colorado One Call procedure will be implemented before any surface disturbance takes place.

38. The holder shall meet Federal, State, and local emission standards for air quality.

39. The holder shall furnish and apply water or use other means satisfactory to the authorized officer for dust control.

40. The holder shall comply with the construction practices and mitigating measures established by 33 CFR 323.4, which sets forth the parameters of the "nationwide permit" required by Section 404 of the Clean Water Act. If the proposed action exceeds the parameters of the nationwide permit, the holder shall obtain an individual permit from the appropriate office of the Army Corps of Engineers and provide the authorized officer with a copy of same. Failure to comply with this requirement shall be cause for suspension or termination of this right-of-way grant.

41. The holder shall survey and clearly mark the centerline and/or exterior limits of the right-of-way prior to any surface disturbing activity, as determined by the authorized officer.

42. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).

43. The holder shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, the holder shall immediately report the incident, in writing, to the authorized officer and the respective installing authority if known. Where General Land Office or Bureau of Land Management right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands in the United States, latest edition. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the holder shall be responsible for the survey cost.

44. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil shall be deemed too wet to adequately support construction equipment.

45. The holder shall inform the authorized officer within 48 hours of any accidents on federal lands that require reporting to the Department of Transportation as required by 49 CFR Part 195.

46. The holder is prohibited from discharging oil or other pollutants into or upon the navigable waters of the United States, adjoining shorelines, or the waters of the contiguous zone in violation of Section 311 of the Clean Water Act as amended, 33 U.S.C. 1321, and the regulations issued thereunder, or applicable laws of the State(s) of xx and regulations issued thereunder. Holder shall give immediate notice of any such discharge to the authorized officer and such other Federal and State officials as are required by law to be given such notice.

47. Prior to any discharge, hydrostatic testing water will be tested and processed, if necessary, to ensure that the water meets local, State or Federal water quality standards. Prior to discharge of hydrostatic testing water from the pipeline, the holder shall design and install a suitable energy dissipater at the outlets, and design and install suitable channel protection structures necessary to ensure that there will be no erosion or scouring of natural channels within the affected watershed as a result of such discharge. The holder will be held responsible for any erosion or scouring resulting from such discharge. Sandbags, rock, or other materials or objects installed shall be removed from the site upon completion of hydrostatic testing.

48. All permanent structures, facilities and equipment placed above ground shall be painted Munsell Soil Color Chart Juniper Green or Equivalent within six months of installation.

COMPLIANCE/MONITORING: Compliance will be conducted by the realty staff every five years.

NAME OF PREPARER: Penny Brown

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: _____
Field Manager

DATE SIGNED: 8/18/06

ATTACHMENTS: General Location Map of the proposed action.

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Location Map of the Proposed Action
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